

IN THE CLAIMS

The following is a complete listing of claims with a status identifier in parenthesis.

LISTING OF CLAIMS

1. (Currently Amended) A method for retransmitting information in a communication channel of a wireless communication system, the communication channel including a plurality of fixed length frames each divided into a plurality of time slots of equal duration, the method comprising:

transmitting a code multiplexed retransmission of at least part of a previous transmission within one of the a fixed length frames frame using one or more a number of codes of a plurality of codes using a transmitter used to transmit the previous transmission when no confirmation that the information previously transmitted was correctly received, wherein the number of codes used for the retransmission is variable based on [[the]] a condition of the communication channel and a desired redundancy for successful decoding of data in the retransmission.

2. (Currently Amended) The method according to claim 1, wherein redundancy contained within the retransmission is a function of the number of codes used for the previous transmission.

3. (Currently Amended) The method according to claim 1, wherein further comprising: receiving a retransmission request for the at least part of the previous transmission, wherein the retransmission is in response to the retransmission request; and determining the condition of the communication channel is determined by based on at least one of the factors factor selected from the group consisting of quality-based parameters and available resources within the communication channel.

4. (Currently Amended) The method according to claim 1, wherein each of the fixed length frames is allocated to said plurality of codes, and capable of transmitting a combination of one or more signal transmissions selected from the group consisting of new transmissions and retransmissions of previous transmissions further comprising: transmitting, simultaneously, a code multiplexed new transmission within said fixed length frame from said transmitter using a second number of codes of the plurality of codes, wherein the number of codes for the retransmission and the second number of the codes for the new transmission equals a total number of codes of said plurality of codes allocated to said fixed length frame.

5. (Currently Amended) The method according to claim 1, wherein the number of codes is the same for a first the previous transmission and a subsequent corresponding the retransmission of the [[first]] at least part of the previous transmission.

6. (Currently Amended) The method according to claim 1, wherein the number of codes used for a first the previous transmission is different than the number of codes used for a subsequent corresponding the retransmission of the at least part of the [[first]] previous transmission.

7. (Currently Amended) The method according to claim 1, wherein [[a]] said fixed length frame is allocated to said plurality of codes, and is capable of carrying multiple simultaneous transmissions by using one or more different codes for each of the multiple simultaneous transmissions further comprising: transmitting, simultaneously, multiple transmissions within said fixed length frame using a second number of codes of the plurality of codes, wherein the number of codes for the retransmission and the second number of the codes for the multiple transmissions equals a total number of codes of said plurality of codes allocated to said fixed length frame.

8. (Currently Amended) The method according to claim 7, wherein the multiple ~~simultaneous~~ transmissions include a plurality of first transmissions from different users.

9. (Currently Amended) The method according to claim 7, wherein the multiple ~~simultaneous~~ transmissions include a plurality of retransmissions of previous transmissions from different users.

10. (Currently Amended) The method according to claim 7, wherein the multiple ~~simultaneous~~-transmissions include a plurality of retransmissions of previous transmissions from said transmitter the same user.

11. (Currently Amended) The method according to claim 7, wherein the multiple ~~simultaneous~~ transmissions include a first transmission and one or more retransmissions from the same user.

12. (Currently Amended) The method according to claim 7, wherein the multiple ~~simultaneous~~ transmissions include one or more first transmissions from one or more users and one or more retransmissions of previous transmissions from the one or more users.

13. (Original) The method according to claim 1, wherein the fixed length frames have a duration of 2 milliseconds and each of the plurality of time slots has a duration of .67 milliseconds.

14. (Currently Amended) A method for providing adaptive incremental redundancy in a communication channel of a wireless communication system, the communication channel including a plurality of fixed length frames, the method comprising:

in a fixed length frame, sending a ~~fixed-duration~~ retransmission of [[a]] at least part of a previous transmission in a domain selected from the group consisting of a code domain, a frequency domain, and a space domain using a transmitter used to transmit the previous

transmission when no confirmation that the information previously transmitted was correctly received,

wherein the number of resources selected from the group consisting of codes, frequencies, and antennas that are used for the retransmission is variable and a number of codes is varied for the retransmission to provide a desired redundancy for successful decoding of data in the retransmission.

15. (Currently Amended) A method for providing adaptive incremental redundancy in a communication channel of a wireless communication system, the communication channel including a plurality of fixed length frames, the method comprising:

in a fixed length frame, sending a fixed duration retransmission of [[a]] at least part of the previous transmission in a domain selected from the group consisting of a code domain, a frequency domain, and a space domain using a transmitter used to transmit the previous transmission when no confirmation that the information previously transmitted was correctly received,

wherein a transmission format associated with the domain used for the retransmission is variable and a number of codes is varied for the retransmission to provide a desired redundancy for successful decoding of data in the retransmission.

16. (Currently Amended) The method according to claim 15, wherein the transmission format in the code domain is defined by parameters including the number of codes, a modulation, and coding, wherein the transmission format in the frequency domain is defined by parameters including number of frequencies, the number of codes, the modulation, and the coding, and wherein the transmission format in the space domain is defined by parameters including number of antennas, the number of codes, the modulation, and the coding.

17. (Currently Amended) A method for providing adaptive incremental redundancy in a communication channel of a wireless communication system, the communication channel including a plurality of fixed length frames, the method comprising:

in a fixed length frame, sending a fixed duration retransmission of a previous transmission in the code domain using a transmitter used to transmit the previous transmission when no confirmation that the information previously transmitted was correctly received,

wherein a transmission format used for the retransmission is variable and a number of codes is varied for the retransmission to provide a desired redundancy for successful decoding of data in the retransmission.

18. (Currently Amended) The method according to claim 17, wherein the transmission format is defined by parameters including the number of codes, a modulation, and coding.

19. (Original) The method according to claim 18, wherein the transmission format is varied by changing one or more of the parameters.

20. (Currently Amended) The method according to claim 7, further comprising the step of transmitting a multi-level acknowledgement/negative acknowledgement (ACK/NACK) in response to the multiple transmissions that occur in the same frame for the same user.